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1772

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/760,337

Applicant(s)

PETTIS, RODNEY L.

Examiner

Sow-Fun Hon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                               |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                          | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/02/05</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/02/05 has been entered.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1-7, 9-26 are rejected under 35 U.S.C. 103(a) as being obvious over Schirmer (US 5,219,666).

Regarding claims 1-4, 15-19, Schirmer teaches a combination product and shrink-wrap packaging film (column 8, lines 10-20), the combination comprising a product (soft drink can); and a shrink-wrap packaging film contacting and substantially surrounding the product and shrunk thereon (column 8, lines 10-20). The shrink-wrap packaging film comprises a first outermost layer of elastomer (second layer comprising styrene butadiene copolymer, column 12, lines 37-39), a second inner layer of polyolefin (a first layer comprising very low density polyethylene, column 12, lines 35-40) overlying and abuttingly contacting the first outermost layer of elastomer (wherein the second

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layer is adhered directly to the first layer, column 12, lines 43-44), as opposed to the next claimed embodiment (wherein the second layer is adhered to the first layer by means of a polymeric adhesive disposed between the first and second layers, column 12, lines 45-47).

Schirmer teaches that the packaging film has excellent clarity (column 2, lines 45-50), higher modulus and toughness (column 1, lines 47-58), and therefore has enhanced optical and mechanical properties for a selected overall packaging gauge thickness to allow the product to be seen more clearly through the packaging film and to increase modulus for the packaging film. Due to the higher modulus and toughness, the packaging film is not punctured easily when an outside force is applied thereto, and also allows the packaging film to be readily usable with packaging machinery at relatively high speeds (column 1, lines 45-50).

Schirmer provides an embodiment where the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer (column 3, lines 10-20). Schirmer fails to teach a third outermost layer of elastomer placed so that it overlies and abuttingly contacts the second inner layer of the polyolefin. However, Schirmer teaches an embodiment where the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, and an embodiment wherein the layer of elastomer is adhered directly to the layer of polyolefin.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have directly adhered the third outermost layer of elastomer

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to the second inner layer of polyolefin so as to overly and abuttingly contact the second inner layer of polyolefin, as taught by Schirmer.

Regarding claims 5, 20, Schirmer teaches that the overall shrink-wrap packaging film gauge thickness is 1 mil (column 8, lines 1-5), which is within the claimed range of about 0.5 to about 3 mil, and so is more economical to manufacture without a reduction in clarity or strength of the shrink-wrap packaging film.

Regarding claims 6, 21, Schirmer teaches that the first and third outermost layers of elastomer each is about 13 %, which is within the claimed range of about 10 % to about 25 %, of the final film gauge thickness (column 8, lines 5-10), which means that without the intermediate adhesive layers, the second inner layer of polyolefin would form about  $(100 - (2 \times 13) =) 74$  % of the final gauge thickness, which is within the claimed range of about 50 to about 80 %.

Regarding claims 7, 22, although Schirmer fails to teach that the enhanced optical properties comprises a haze in the range of about 1 % to about 10 % so that the packaging film is clear and the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, Schirmer teaches that the film is ultra clear (column 8, lines 1-5).

Therefore, one of ordinary skill in the art would have recognized that the ultraclear film would read on the claimed haze in the range of about 1 % to about 10 % since the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, as taught by Schirmer.

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Regarding claims 9, 22, 27, Schirmer fails to teach a 45° gloss in a range of about 70% to about 110%. However, Schirmer teaches that the film is ultra-clear and glossy (column 8, lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed 45° gloss in a range of about 70% to about 110% in the film, so that the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, as taught by Schirmer.

Regarding claim 10, Schirmer teaches that the packaging film is also a label film (column 1, lines 35-40) so that printability is desirable (column 1, lines 47-51), meaning that there are indicia (print) on the packaging film, so that the combination product and shrink-wrap packaging are more aesthetically pleasing to consumers.

Regarding claims 11, 23, Schirmer fails to disclose a tensile modulus in a range of about 50, 000 psi to about 120, 000 psi. However, Schirmer teaches that the packaging film has higher modulus and toughness to permit its use with a label manufacturing apparatus (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed tensile modulus in a range of about 50, 000 psi to about 120, 000 psi in the film, so that the shrink-wrap packaging film is readily usable with packaging machinery at relatively high speeds, as taught by Schirmer.

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Regarding claims 12, 24, Schirmer fails to disclose a tensile strength in a range of about 2,000 psi to about 3500 psi. However, Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed tensile strength in a range of about 2,000 psi to about 3500 psi in the film, so that the shrink-wrap packaging film can withstand forces applied thereto being placed upon the shrink-wrap packaging film, as taught by Schirmer.

Regarding claims 13, 25, Schirmer fails to disclose a shrink in a transverse direction of about 0 % to about 60 % and in a machine direction of about 60 % to about 90 %. However, Schirmer teaches that orientation is imparted in primarily the transverse direction, or both the transverse direction and the machine (longitudinal) direction (column 5, lines 35-45), which then dictates how much shrinkage occurs in the transverse direction and the machine direction, and that the film shrank tightly around the product (column 8, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed shrink in a transverse direction of about 0 % to about 60 % and in a machine direction of about 60 % to about 90 %, by varying the degree of orientation and shrink conditions, in order to obtain a shrink-wrap packaging film which shrinks sufficiently to securely restrain the product within the shrink-wrap packaging film, as taught by Schirmer.

Regarding claims 14, 26, Schirmer fails to disclose a dart impact strength in a range of about 300 grams to about 1000 grams. However, Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed dart impact strength in a range of about 300 grams to about 1000 grams in the film, so that the shrink-wrap packaging film is not punctured easily when an outside force is applied thereto, as taught by Schirmer.

Regarding claims 28-31, Schirmer teaches a combination product and shrink-wrap packaging film (column 8, lines 10-20), the combination comprising a product (soft drink can); and a shrink-wrap packaging film contacting and substantially surrounding the product and shrunk thereon (column 8, lines 10-20). The shrink-wrap packaging film comprises a first outermost layer of elastomer (second layer comprising styrene butadiene copolymer, column 12, lines 37-39), a second inner layer of polyolefin (a first layer comprising very low density polyethylene, column 12, lines 35-40) overlying and abuttingly contacting the first outermost layer of elastomer (wherein the second layer is adhered directly to the first layer, column 12, lines 43-44), as opposed to the next claimed embodiment (wherein the second layer is adhered to the first layer by means of a polymeric adhesive disposed between the first and second layers, column 12, lines 45-47). Schirmer teaches that the packaging film has excellent clarity (column 2, lines 45-50), higher modulus and toughness (column 1, lines 47-58), and therefore has enhanced optical and mechanical properties for a selected overall packaging gauge



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thickness to allow the product to be seen more clearly through the packaging film and to increase modulus for the packaging film. Due to the higher modulus and toughness, the packaging film is not punctured easily when an outside force is applied thereto, and also allows the packaging film to be readily usable with packaging machinery at relatively high speeds (column 1, lines 45-50).

Schirmer provides an embodiment where the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer (column 3, lines 10-20). Schirmer fails to teach a third outermost layer of elastomer placed so that it overlies and abuttingly contacts the second inner layer of the polyolefin. However, Schirmer teaches an embodiment where the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, and an embodiment wherein the layer of elastomer is adhered directly to the layer of polyolefin.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have directly adhered the third outermost layer of elastomer to the second inner layer of polyolefin so as to overly and abuttingly contact the second inner layer of polyolefin, as taught by Schirmer.

Schirmer fails to disclose a shrink in a transverse direction of about 0 % to about 60 % and in a machine direction of about 60 % to about 90 %. However, Schirmer teaches that orientation is imparted in primarily the transverse direction, or both the transverse direction and the machine (longitudinal) direction (column 5, lines 35-45), which then dictates how much shrinkage occurs in the transverse direction and the

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machine direction, and that the film shrank tightly around the product (column 8, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed shrink in a transverse direction of about 0 % to about 60 % and in a machine direction of about 60 % to about 90 %, by varying the degree of orientation and shrink conditions, in order to obtain a shrink-wrap packaging film which shrinks sufficiently to securely restrain the product within the shrink-wrap packaging film, as taught by Schirmer.

Schirmer fails to disclose a tensile modulus in a range of about 50, 000 psi to about 120, 000 psi. However, Schirmer teaches that the packaging film has higher modulus and toughness to permit its use with a label manufacturing apparatus (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed tensile modulus in a range of about 50, 000 psi to about 120, 000 psi in the film, so that the shrink-wrap packaging film is readily usable with packaging machinery at relatively high speeds, as Schirmer.

Schirmer fails to disclose a tensile strength in a range of about 2,000 psi to about 3500 psi. However, Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed tensile

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strength in a range of about 2,000 psi to about 3500 psi in the film, so that the shrink-wrap packaging film can withstand forces applied thereto being placed upon the shrink-wrap packaging film, as taught by Schirmer.

Regarding claim 32, although Schirmer fails to teach that the enhanced optical properties comprises a haze in the range of about 1 % to about 10 % so that the packaging film is clear and the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, Schirmer teaches that the film is ultra clear (column 8, lines 1-5).

Therefore, one of ordinary skill in the art would have recognized that the ultraclear film would read on the claimed haze in the range of about 1 % to about 10 % since the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, as taught by Schirmer.

Regarding claim 33, Schirmer fails to teach a 45° gloss in a range of about 70% to about 110%. However, Schirmer teaches that the film is ultra-clear and glossy (column 8, lines 1-5).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed 45° gloss in a range of about 70% to about 110% in the film, so that the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, as taught by Schirmer.

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Regarding claim 34, Schirmer teaches that the overall shrink-wrap packaging film gauge thickness is 1 mil (column 8, lines 1-5), which is within the claimed range of about 0.5 to about 3 mil, and so is more economical to manufacture without a reduction in clarity or strength of the shrink-wrap packaging film.

Regarding claim 35, Schirmer fails to disclose a dart impact strength in a range of about 300 grams to about 1000 grams. However, Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the processing conditions of the packaging film to provide the claimed dart impact strength in a range of about 300 grams to about 1000 grams in the film, so that the shrink-wrap packaging film is not punctured easily when an outside force is applied thereto, as taught by Schirmer.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schirmer as applied to claims 1-7, 9-26 above, and further in view of Phillips (US 3,580,380).

Regarding claim 8, Schirmer fails to teach that there is indicia on the product. However, Schirmer teaches that the product is a soft drink can (column 8, lines 11-12), and most cans have indicia printed directly on the surface of the cans, as evidenced by Phillips.

Phillips teaches that oriented indicia on a can enhance their own advertising, wherein a six-pack of cans is encapsulated by a heat-shrinkable packaging film (column 3, lines 45-55) which is transparent (column 1, lines 63-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have printed indicia on the product of Schirmer, so that the indicia can be seen more clearly through the shrink-wrap packaging film without the necessity of removing the shrink-wrap packaging film, taught by Phillips.

### ***Response to Arguments***

3. Applicant's arguments filed 10/03/05 have been fully considered but they are not persuasive.

4. Applicant argues that Schirmer is directed at replacing polyvinyl chloride packaging used for overwrapping trayed food products and for labeling on cans and bottles, whereas Applicant is directed towards a shrink wrap for packaging products to be viewed through the packaging, which has both advantageous optical and mechanical properties, and that therefore there is no motivation to modify Schirmer to solve the problem of Applicant, which is to package multiple bottles together while still allowing a consumer to view the product contained within the packaging.

Applicant is respectfully reminded that Schirmer does teach a shrink-wrap packaging film contacting and substantially surrounding the product and shrunk thereon (column 8, lines 10-20), wherein the film is formed into a shrink label that is wrapped around the can (column 8, lines 12-13), and that that the packaging film has excellent elasticity, toughness, stretch and optical properties (column 1, lines 55-58), which satisfies Applicant's criteria of advantageous optical and mechanical properties, and

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therefore can be used to package multiple bottles as well as one bottle, and allow the consumer to view the product contained within the packaging. Shrink-wrap film is notoriously well-known in the art as a ubiquitous packaging film, which also functions as shrink label film when printed with labeling indicia.

5. Applicant argues that the Office appears to have overlooked that throughout Schirmer, the preferred embodiment that is disclosed and taught relates to a five layer film, a core layer of very low density polyethylene, two layers of adhesive, and two outer layers of styrene butadiene copolymer, and that the because Schirmer reemphasizes the use of adhesive after merely hinting at directly applying a single layer of SBC to a single layer of VLDPE, one skilled in the art would not readily make a leap of faith without some additional suggestion or motivation from a two layer film without adhesive to an embodiment of a three layer or more film without the use of intermediate adhesive.

Applicant is respectfully reminded that Schirmer does not just hint at directly applying a single layer of SBC to a single layer of VLDPE, but actually claims a shrink-wrap packaging film comprising a first outermost layer of elastomer (second layer comprising styrene butadiene copolymer, column 12, lines 37-39), a second inner layer of polyolefin (a first layer comprising very low density polyethylene, column 12, lines 35-40) overlying and abuttingly contacting the first outermost layer of elastomer (wherein the second layer is adhered directly to the first layer, column 12, lines 43-44), as opposed to the next claimed embodiment (wherein the second layer is adhered to the first layer by means of a polymeric adhesive disposed between the first and second layers, column 12, lines 45-47). Schirmer provides an embodiment where the third

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outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, whereby the third outermost layer of elastomer is indirectly adhered to the second inner layer of polyolefin via a polymeric adhesive (column 3, lines 10-20). Therefore, although Schirmer fails to teach a third outermost layer of elastomer placed so that it overlies and abuttingly contacts the second inner layer of the polyolefin, because Schirmer teaches an embodiment where the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, and claims an embodiment wherein the layer of elastomer is adhered directly to the layer of polyolefin, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have directly adhered the third outermost layer of elastomer to the second inner layer of polyolefin so as to overly and abuttingly contact the second inner layer of polyolefin.

6. Applicant argues that the clear implication by Schirmer reemphasizing the use of an adhesive layer taught and claimed by Schirmer is more likely to work than if an adhesive layer is used rather than the theoretical reference to directly adhering two layers together.

Applicant is respectfully reminded that Applicant has not provided clear comparative data demonstrating that the multilaminate of Applicant provides unexpected results over the multilaminate which is obvious over Schirmer.

7. Applicant cites a decision in which turning an invention upside down that uses gravity as a separator for fluids would not have rendered a claimed invention obvious,

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as setting precedence that using three or more layers in a multilayer film without adhesive layers in between the layers would be inconsistent with the disclosures and teachings in Schirmer.

Applicant is respectfully that Schirmer actually claims a layer of elastomer directly adhered to a layer of polyolefin, and teaches an embodiment in which the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, so that one skilled in the art would have been motivated to have applied another layer of elastomer directly onto the other side of the layer of polyolefin, providing three or more layers in an multilayer film without adhesive layers in between the layers.

8. Applicant argues that Schirmer indicates that during testing, it was found that when the thickness of the outermost SBC layers were decreased in thickness, that the final film exhibited better elasticity (column 9, lines 42-45), and that therefore it would be counterintuitive to one skilled in the art to add additional layers to the embodiment comprising a single layer of VLDPE and a single layer of SBC, as this would increase the total thickness of the SBC layering of the structure, which according to test results from Schirmer would diminish the elasticity of the film, as well as adversely affect the optical properties of the film.

Applicant is respectfully apprised that Schirmer talks about the thickness of the outermost layers (column 9, lines 43-45), using the plural sense for the outermost layers of SBC, not singular, and therefore does not support Applicant's argument that Schirmer is talking about decreasing the thickness of a single layer of SBC. Furthermore,



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Schirmer points out that although the elasticity of the final film is improved when the thickness of the outermost layers of the film is decreased, this improvement is countered by more shrinkback as the film is aged (column 9, lines 44-46), thus leaving the option to one skilled in the art not to decrease the thickness of the outermost layers of elastomer if shrinkback during aging is not desired. The film of Schirmer has a thickness of 1 mil (column 8, lines 1-5), which is within the claimed range of about 0.5 to about 3 mil. Schirmer does not appear to have disclosed any adverse effects to the optical properties of the film regarding the thickness of the outermost layers.

9. Applicant argues that both the five layer film and the two layer film of Schirmer are alleged to have a preferred thickness of less than 1 mil, while Applicant's three layer film, without the use of adhesive intermediate layers, has a thickness in the range of 0.5 to 3 mils, which in no way equates to a less than 1 mil for a five layer film with intermediate layers of adhesive.

Applicant is respectfully reminded that Schirmer points out that although the elasticity of the final film is improved when the thickness of the outermost layers of the film is decreased, this improvement is countered by more shrinkback as the film is aged (column 9, lines 44-46), thus leaving the option to one skilled in the art not to decrease the thickness of the outermost layers of elastomer if shrinkback during aging is not desired. Furthermore, Applicant's present claim language uses the term "comprising" which does not preclude other layers present in the multilayer film, such that Applicant does not claim a film consisting of three layers. Applicant's arguments are therefore premature in the absence of an amendment to claim a three-layer film.

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10. Applicant argues that nothing in Schirmer's test tables indicate what the mechanical properties or optical properties would be [ for a film consisting of a layer of polyolefin and two layers of elastomer, each one overlying and abuttingly contacting one of the two sides of the layer of polyolefin, with a thickness in the range of 0.5 to 3 mils].

Applicant is respectfully reminded that Schirmer actually claims a layer of elastomer directly adhered to a layer of polyolefin, and teaches an embodiment in which the third outermost layer of elastomer is placed so that the second inner layer of polyolefin is positioned between the first and third outermost layers of elastomer, so that one skilled in the art would have been motivated to have applied another layer of elastomer directly onto the other side of the layer of polyolefin, providing three or more layers in an multilayer film without adhesive layers in between the layers. Schirmer teaches that the film has excellent elasticity, toughness, stretch and optical properties (column 1, lines 52-58). Therefore one skilled in the art would have been motivated to put the two embodiments of Schirmer into one with a reasonable expectation of success in terms of producing a film with acceptable elasticity, toughness, stretch and optical properties. Furthermore, Applicant is respectfully apprised that Applicant's present claim language uses the term "comprising" which does not preclude other layers present in the multilayer film, such that Applicant does not claim a film consisting of three layers. Applicant's arguments are therefore premature in the absence of an amendment to claim a three-layer film.

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11. Applicant argues that Applicant's claimed inventions should be unsuccessful with poor optical quality because the thickness range of Applicant's film generally exceeds the preferred total film thickness disclosed by Schirmer.

Applicant is respectfully apprised that Schirmer does not appear to discuss the effect of overall film thickness on the optical properties of the film, and that the 0.5 to 3 mil range of Applicant's film thickness does include the 1 mil thickness of Schirmer's film. Furthermore, Applicant has not demonstrated criticality of the claimed range. See MPEP 2144.05 [R-3].

12. Applicant argues that Schirmer does not show or suggest a haze in a range of about 1 % to about 10 %, a 45° gloss in a range of about 70 % to about 110%, a tensile modulus in a range of about 50, 000 to about 120, 000 psi, a tensile strength in a range of about 2000 to about 3500 psi, or a dart impact strength in a range of about 300 to about 1000 grams.

Applicant is respectfully apprised that although Schirmer fails to teach that the enhanced optical properties comprises a haze in the range of about 1 % to about 10 % so that the packaging film is clear and the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film, because Schirmer teaches that the film is ultra clear (column 8, lines 1-5), and because zero haze is very difficult to achieve, the claimed haze in the range of about 1 % to about 10 % is inherent in the ultra clear film so that the packaging film is clear and the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film.

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Applicant is respectfully apprised that although Schirmer fails to teach a 45° gloss in a range of about 70% to about 110%, because Schirmer teaches that the film is ultra-clear and glossy (column 8, lines 1-5) hence teaching the desirability of clarity and gloss, the claimed 45° gloss in a range of about 70% to about 110% is either inherent in the film, or the result of optimizing the processing conditions of the packaging film by one of ordinary skill in the art, so that the product can be easily seen through the packaging film once the packaging film is heated to securely restrain the product with the packaging film..

Applicant is respectfully apprise that although Schirmer fails to disclose a tensile modulus in a range of about 50, 000 psi to about 120, 000 psi, because Schirmer teaches that the packaging film has higher modulus and toughness to permit its use with a label manufacturing apparatus (column 1, lines 47-58), hence teaching the desirability of a high tensile modulus, the claimed tensile modulus in a range of about 50, 000 psi to about 120, 000 psi, is either inherent in the film, or the result of optimizing the processing conditions of the packaging film by one of ordinary skill in the art, so that the shrink-wrap packaging film is readily usable with packaging machinery at relatively high speeds.

Applicant is respectfully apprise that although Schirmer fails to disclose a tensile strength in a range of about 2,000 psi to about 3500 psi, because Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58), hence teaching the desirability of a high tensile strength, the claimed tensile strength in a range of about 2,000 psi to about 3500 psi, is either inherent in the film, or the result of

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optimizing the processing conditions of the packaging film by one of ordinary skill in the art, so that the shrink-wrap packaging film can withstand forces applied thereto being placed upon the shrink-wrap packaging film.

Applicant is respectfully apprised that although Schirmer fails to disclose a dart impact strength in a range of about 300 grams to about 1000 grams, because Schirmer teaches that the packaging film has higher modulus and toughness (column 1, lines 47-58), hence teaching the desirability of a high toughness and hence high impact strength, the claimed dart impact strength in a range of about 300 grams to about 1000 grams, is either inherent in the film, or the result of optimizing the processing conditions of the packaging film by one of ordinary skill in the art, so that the shrink-wrap packaging film is not punctured easily when an outside force is applied thereto.

13. Applicant argues that the Office ignores the adhesive layers of Schirmer in the analysis despite the fact that the chemical structures have related properties.

Applicant is respectfully apprised that because Schirmer emphasizes that the combination of polyolefin layer and SBC layer provides a film which exhibits excellent elasticity, toughness, stretch and optical properties (column 1, lines 52-58), claims a first outermost layer of elastomer (second layer comprising styrene butadiene copolymer, column 12, lines 37-39), a second inner layer of polyolefin (a first layer comprising very low density polyethylene, column 12, lines 35-40) overlying and abuttingly contacting the first outermost layer of elastomer (wherein the second layer is adhered directly to the first layer, column 12, lines 43-44), and then teaches an embodiment in which the third outermost layer of SBC is placed so that the second inner layer of polyolefin is

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positioned between the first and third outermost layers of SBC (column 3, lines 10-20), one skilled in the art would have been motivated to provide a film in which two outermost layers of SBC overly and contact a layer of polyolefin, wherein the film has the corresponding optical and mechanical properties. Applicant has not demonstrated that the claimed optical and mechanical properties would not accompany such a film. Instead, Applicant continues to argue the adhesive layers, which are not part of the discussion.

14. Applicant argues that Schirmer only makes broad and general representations regarding certain of the advantageous features of its film, such as the film exhibiting excellent elasticity, toughness, stretch and optical properties such as gloss and clarity, [without any numerical values], and that the specific numerical values claimed by Applicant are new and surprising results based upon the novel and unobvious multilayer structure that does not utilize intermediate adhesive layers.

Applicant is respectfully apprised that first of all, the multilayer structure that does not utilize intermediate adhesive layers is not novel and unobvious as discussed above, and that secondly, Applicant has not demonstrated that the specific numerical values of the properties are not a direct result of the multilayer structure.

15. Applicant argues that the possibility wherein the adhesive layers are removed, and the middle polyolefin layer thickness remains the same while the two outer layers increase in size, would bring the sizes of the layers of Schirmer outside of Applicant's ranges, specifically, 42% for the middle layer and 29% for the outermost layers, or 84% and 8 % for the outermost layers, as calculated by Applicant.

Applicant is respectfully reminded that Applicant claims a range of about 10% to 25% for the outermost layers, and a range of about 50% to about 80% for the inner layer. The legal term "about" potentially provides for 42% being within the range of "about 50%", for 29% being within the range of "about 25%", for 84% being within the range of "about 80%", and for 8% being within the range of "about 10%". See MPEP 2144.05 [R-3].

16. In response to Applicant's argument that the Office's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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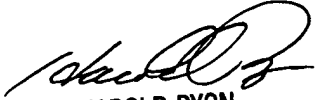
Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

S. Hon.  
Sow-Fun Hon  
11/08/05

  
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SUPERVISORY PATENT EXAMINER  
1772  
11/28/05